Nicholas Caro Lopez

Burlington, ON | [Website] | [LinkedIn] | [Github]

Education

Toronto Metropolitan University (formerly Ryerson University)   Sept. 2022 - Present

Candidate for Bachelor of Science (Honours), Computer Science Co-op   CGPA: 4.04/4.33

- **Relevant Coursework**: Introduction to Software Engineering, Data Structures, Operating Systems I, Web Systems Development, Intro to Unix & C & C++, Probability and Statistics, Linear Algebra
- **Extracurricular Involvement**: Senior Representative for Metropolitan Open Source Society
- **Awards**: Faculty of Science Dean's List 2022-23, Academic Entrance Scholarship

Technical Skills

- **Computer Languages**: Python, Java, C, HTML, CSS, JavaScript, Lisp, Perl, PHP, Ruby
- **Frameworks/Libraries**: MySQL, Tailwind CSS, Bootstrap, JQuery, PyQt
- **Development Tools**: Visual Studio Code, Git/Github, Unix/Linux
- **Spoken Languages**: English, Spanish

Work Experience

Software Developer, Toronto Metropolitan University - Toronto, ON   Sept. 2023 - Present

- Integrated an advanced image-based motion tracking extension into **open-source software**, 3D Slicer
- Cooperated effectively within a **Agile software development team**, optimizing workflow, visualizing progress, and delivering quality software solutions on time
- Reworked the **Backend Logic** of the extension, enabling multi-file deletion and processing within a single session
- Created new functionality on the graphical user interface, increasing usability by 28%, using the **3D Slicer Python API**

Teaching Assistant, RoboThink Northwest Toronto - Burlington, ON   May 2023 - Aug. 2023

- Designed and taught a comprehensive curriculum introducing students to programming in Scratch
- Assisted the STEM Teacher in utilizing RoboThink materials effectively to deliver engaging and interactive lessons
- Enhanced students learning through administrative tasks such as organizing curriculum binders and printouts, improving productivity by 50%
- Demonstrated attentiveness to individual students, providing personalized support and guidance to enhance their learning experience

Associate, Dollarama - Burlington, ON   May 2022 - Aug. 2022

- Provided courteous customer service by warmly welcoming customers and addressing their inquiries or issues promptly
- Conducted financial transactions including credit/debit cards, cash, gift cards, and store credits with proficiency

Personal Projects

[Sudoku Solver] - HTML, CSS, JavaScript   May 2023 - Aug. 2023

- Defined an **Event Listener** and **Regex** for capturing and restricting user input to digits 1-9
- Created a **responsive** and **interactive web page** using CSS concepts, namely **Media Queries** and **Flexbox/Grid Layout**
- Employed the **Backtracking Algorithm** to solve every valid Sudoku board inputted by the user and displayed the solution dynamically on the web page

Simon-Says Memory Game - Java   Feb. 2023 - Apr. 2023

- Utilized the **JFrame** library to generate and display the graphical user interface
- Incorporated **Object-Oriented Programming** concepts such as **Classes**, **Objects** and **Inheritance** to create and display items such as the game level and buttons
- Applied **Inheritance** and **Method Overriding** enabling the program to receive the user's mouse clicks and execute certain functions accordingly

Riemann Sum Calculator - Python   Oct. 2022 - Dec. 2022

- Wrote a script with the purpose of approximating the area under a polynomial curve
- Implemented **Variables**, **Data Types**, **Control Flow**, **Modules** and **User Input** to read a given mathematical function
- Executed **Functions**, **Exception Handling** and **File I/O** to calculate the integral and return the area in a .txt file